

ABSTRACT

A circuit and a method are given, to realize a very efficient driver device for igniters or squibs as used e.g. in airbag applications. Special attention has been turned to include secure and always reliable operating features into the device and at the same time to reach for a low-cost implementation with modern integrated circuit technologies. Controlled firing operation and sophisticated diagnostic mechanisms are realized. These design features have been acquired by use of current mirror circuit principles for the switching devices where appropriate and with special regard to production cost. Current trimming and limitation to secure values are part of the solution.